



SEQUENCE LISTING

<110> O'Brien, Timothy J.
<120> TADG-15: An Extracellular Serine Protease
Overexpressed in Carcinomas
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					20				25				30	
Gly	Leu	Glu	Glu	Gly	Val	Glu	Phe	Leu	Pro	Val	Asn	Asn	Val	Lys
					35				40				45	
Lys	Val	Glu	Lys	His	Gly	Pro	Gly	Arg	Trp	Val	Val	Leu	Ala	Ala
					50				55				60	
Val	Leu	Ile	Gly	Leu	Leu	Leu	Val	Leu	Leu	Gly	Ile	Gly	Phe	Leu
					65				70				75	

Val Trp His Leu Gln Tyr Arg Asp Val Arg Val Gln Lys Val Phe
80 85 90
Asn Gly Tyr Met Arg Ile Thr Asn Glu Asn Phe Val Asp Ala Tyr
95 100 105
Glu Asn Ser Asn Ser Thr Glu Phe Val Ser Leu Ala Ser Lys Val
110 115 120
Lys Asp Ala Leu Lys Leu Leu Tyr Ser Gly Val Pro Phe Leu Gly
125 130 135
Pro Tyr His Lys Glu Ser Ala Val Thr Ala Phe Ser Glu Gly Ser
140 145 150
Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Gln His Leu
155 160 165
Val Glu Glu Ala Glu Arg Val Met Ala Glu Glu Arg Val Val Met
170 175 180
Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val Val Thr Ser
185 190 195
Val Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg Thr Gln
200 205 210
Asp Asn Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu Leu
215 220 225
Met Arg Phe Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala
230 235 240
His Ala Arg Cys Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val
245 250 255
Leu Ser Leu Thr Phe Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu
260 265 270
Arg Gly Ser Asp Leu Val Thr Val Tyr Asn Thr Leu Ser Pro Met
275 280 285
Glu Pro His Ala Leu Val Gln Leu Cys Gly Thr Tyr Pro Pro Ser
290 295 300
B1
Tyr Asn Leu Thr Phe His Ser Ser Gln Asn Val Leu Leu Ile Thr
305 310 315
Leu Ile Thr Asn Thr Glu Arg Arg His Pro Gly Phe Glu Ala Thr
320 325 330
Phe Phe Gln Leu Pro Arg Met Ser Ser Cys Gly Gly Arg Leu Arg
335 340 345
Lys Ala Gln Gly Thr Phe Asn Ser Pro Tyr Tyr Pro Gly His Tyr
350 355 360
Pro Pro Asn Ile Asp Cys Thr Trp Asn Ile Glu Val Pro Asn Asn
365 370 375
Gln His Val Lys Val Ser Phe Lys Phe Phe Tyr Leu Leu Glu Pro
380 385 390
Gly Val Pro Ala Gly Thr Cys Pro Lys Asp Tyr Val Glu Ile Asn
395 400 405
Gly Glu Lys Tyr Cys Gly Glu Arg Ser Gln Phe Val Val Thr Ser
410 415 420
Asn Ser Asn Lys Ile Thr Val Arg Phe His Ser Asp Gln Ser Tyr
425 430 435
Thr Asp Thr Gly Phe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Ser
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Asp Pro Cys Pro Gly Gln Phe Thr Cys Arg Thr Gly Arg Cys Ile
455 460 465

Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp Cys Thr Asp His
470 475 480
Ser Asp Glu Leu Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr
485 490 495
Cys Lys Asn Lys Phe Cys Lys Pro Leu Phe Trp Val Cys Asp Ser
500 505 510
Val Asn Asp Cys Gly Asp Asn Ser Asp Glu Gln Gly Cys Ser Cys
515 520 525
Pro Ala Gln Thr Phe Arg Cys Ser Asn Gly Lys Cys Leu Ser Lys
530 535 540
Ser Gln Gln Cys Asn Gly Lys Asp Asp Cys Gly Asp Gly Ser Asp
545 550 555
Glu Ala Ser Cys Pro Lys Val Asn Val Val Thr Cys Thr Lys His
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Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro
575 580 585
Glu Cys Asp Gly Lys Glu Asp Cys Ser Asp Gly Ser Asp Glu Lys
590 595 600
Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln Ala Arg Val
605 610 615
Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp Gln Val
620 625 630
Ser Leu His Ala Leu Gly Gln Gly His Ile Cys Gly Ala Ser Leu
635 640 645
Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp
650 655 660
Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Trp Thr Ala Phe
665 670 675
Leu Gly Leu His Asp Gln Ser Gln Arg Ser Ala Pro Gly Val Gln
680 685 690
Glu Arg Arg Leu Lys Arg Ile Ile Ser His Pro Phe Phe Asn Asp
695 700 705
Phe Thr Phe Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Pro
710 715 720
Ala Glu Tyr Ser Ser Met Val Arg Pro Ile Cys Leu Pro Asp Ala
725 730 735
Ser His Val Phe Pro Ala Gly Lys Ala Ile Trp Val Thr Gly Trp
740 745 750
Gly His Thr Gln Tyr Gly Gly Thr Gly Ala Leu Ile Leu Gln Lys
755 760 765
Gly Glu Ile Arg Val Ile Asn Gln Thr Thr Cys Glu Asn Leu Leu
770 775 780
Pro Gln Gln Ile Thr Pro Arg Met Met Cys Val Gly Phe Leu Ser
785 790 795
Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ser
800 805 810
Ser Val Glu Ala Asp Gly Arg Ile Phe Gln Ala Gly Val Val Ser
815 820 825
Trp Gly Asp Gly Cys Ala Gln Arg Asn Lys Pro Gly Val Tyr Thr
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Arg Leu Pro Leu Phe Arg Asp Trp Ile Lys Glu Asn Thr Gly Val
845 850 855

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<213> *Homo sapiens*
<220>
<223> Hepsin
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Gln Val Ser Leu Arg Tyr Asp Gly Ala His Leu Cys Gly Gly Ser
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Leu Leu Ser Gly Asp Trp Val Leu Thr Ala Ala His Cys Phe Pro
35 40 45
Glu Arg Asn Arg Val Leu Ser Arg Trp Arg Val Phe Ala Gly Ala
50 55 60
Val Ala Gln Ala Ser Pro His Gly Leu Gln Leu Gly Val Gln Ala
65 70 75
Val Val Tyr His Gly Gly Tyr Leu Pro Phe Arg Asp Pro Asn Ser
80 85 90
Glu Glu Asn Ser Asn Asp Ile Ala Leu Val His Leu Ser Ser Pro
95 100 105
Leu Pro Leu Thr Glu Tyr Ile Gln Pro Val Cys Leu Pro Ala Ala
110 115 120
Gly Gln Ala Leu Val Asp Gly Lys Ile Cys Thr Val Thr Gly Trp
125 130 135
Gly Asn Thr Gln Tyr Tyr Gly Gln Gln Ala Gly Val Leu Gln Glu
140 145 150
Ala Arg Val Pro Ile Ile Ser Asn Asp Val Cys Asn Gly Ala Asp
155 160 165
Phe Tyr Gly Asn Gln Ile Lys Pro Lys Met Phe Cys Ala Gly Tyr
170 175 180
Pro Glu Gly Gly Ile Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro
185 190 195
Phe Val Cys Glu Asp Ser Ile Ser Arg Thr Pro Arg Trp Arg Leu
200 205 210
Cys Gly Ile Val Ser Trp Gly Thr Gly Cys Ala Leu Ala Gln Lys
215 220 225
Pro Gly Val Tyr Thr Lys Val Ser Asp Phe Arg Glu Trp Ile Phe
230 235 240
Gln Ala Ile Lys Thr His Ser Glu Ala Ser Gly Met Val Thr Gln
245 250 255

Leu

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<212> PRT

<213> *Homo sapiens*

<220>

<223> SCCE

<400> 4

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Gln Val Ala Leu Leu Ser Gly Asn Gln Leu His Cys Gly Gly Val
20 25 30
Leu Val Asn Glu Arg Trp Val Leu Thr Ala Ala His Cys Lys Met
35 40 45
Asn Glu Tyr Thr Val His Leu Gly Ser Asp Thr Leu Gly Asp Arg
50 55 60
Arg Ala Gln Arg Ile Lys Ala Ser Lys Ser Phe Arg His Pro Gly
65 70 75
Tyr Ser Thr Gln Thr His Val Asn Asp Leu Met Leu Val Lys Leu
80 85 90
Asn Ser Gln Ala Arg Leu Ser Ser Met Val Lys Lys Val Arg Leu
95 100 105
Pro Ser Arg Cys Glu Pro Pro Gly Thr Thr Cys Thr Val Ser Gly
110 115 120
Trp Gly Thr Thr Thr Ser Pro Asp Val Thr Phe Pro Ser Asp Leu
125 130 135
Met Cys Val Asp Val Lys Leu Ile Ser Pro Gln Asp Cys Thr Lys
140 145 150
Val Tyr Lys Asp Leu Leu Glu Asn Ser Met Leu Cys Ala Gly Ile
155 160 165
Pro Asp Ser Lys Lys Asn Ala Cys Asn Gly Asp Ser Gly Gly Pro
170 175 180
Leu Val Cys Arg Gly Thr Leu Gln Gly Leu Val Ser Trp Gly Thr
185 190 195
Phe Pro Cys Gly Gln Pro Asn Asp Pro Gly Val Tyr Thr Gln Val
200 205 210
Cys Lys Phe Thr Lys Trp Ile Asn Asp Thr Met Lys Lys His Arg
215 220 225

B1
B2

<210> 5

<211> 225

<212> PRT

<213> *Homo sapiens*

<220>

<223> Trypsin

<400> 5

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Gln Val Ser Leu Asn Ser Gly Tyr His Phe Cys Gly Gly Ser Leu
20 25 30

Ile	Asn	Glu	Gln	Trp	Val	Val	Ser	Ala	Gly	His	Cys	Tyr	Lys	Ser
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Arg	Ile	Gln	Val	Arg	Leu	Gly	Glu	His	Asn	Ile	Glu	Val	Leu	Glu
50									55					60
Gly	Asn	Glu	Gln	Phe	Ile	Asn	Ala	Ala	Lys	Ile	Ile	Arg	His	Pro
65									70					75
Gln	Tyr	Asp	Arg	Lys	Thr	Leu	Asn	Asn	Asp	Ile	Met	Leu	Ile	Lys
80									85					90
Leu	Ser	Ser	Arg	Ala	Val	Ile	Asn	Ala	Arg	Val	Ser	Thr	Ile	Ser
95									100					105
Leu	Pro	Thr	Ala	Pro	Pro	Ala	Thr	Gly	Thr	Lys	Cys	Leu	Ile	Ser
110									115					120
Gly	Trp	Gly	Asn	Thr	Ala	Ser	Ser	Gly	Ala	Asp	Tyr	Pro	Asp	Glu
125									130					135
Leu	Gln	Cys	Leu	Asp	Ala	Pro	Val	Leu	Ser	Gln	Ala	Lys	Cys	Glu
140									145					150
Ala	Ser	Tyr	Pro	Gly	Lys	Ile	Thr	Ser	Asn	Met	Phe	Cys	Val	Gly
155									160					165
Phe	Leu	Glu	Gly	Gly	Lys	Asp	Ser	Cys	Gln	Gly	Asp	Ser	Gly	Gly
170									175					180
Pro	Val	Val	Cys	Asn	Gly	Gln	Leu	Gln	Gly	Val	Val	Ser	Trp	Gly
185									190					195
Asp	Gly	Cys	Ala	Gln	Lys	Asn	Lys	Pro	Gly	Val	Tyr	Thr	Lys	Val
200									205					210
Tyr	Asn	Tyr	Val	Lys	Trp	Ile	Lys	Asn	Thr	Ile	Ala	Ala	Asn	Ser
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20									25					30
Ser	Leu	Ile	Ser	Glu	Asp	Trp	Val	Val	Thr	Ala	Ala	His	Cys	Gly
35									40					45
Val	Arg	Thr	Ser	Asp	Val	Val	Val	Ala	Gly	Glu	Phe	Asp	Gln	Gly
50									55					60
Ser	Asp	Glu	Glu	Asn	Ile	Gln	Val	Leu	Lys	Ile	Ala	Lys	Val	Phe
65									70					75
Lys	Asn	Pro	Lys	Phe	Ser	Ile	Leu	Thr	Val	Asn	Asn	Asp	Ile	Thr
80									85					90
Leu	Leu	Lys	Leu	Ala	Thr	Pro	Ala	Arg	Phe	Ser	Gln	Thr	Val	Ser
95									100					105

<210> 7

<211> 255

<212> PRT

<213> *Homo sapiens*

<220>

<223> Factor 7

<400> 7

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									20		25			30
Leu	Ile	Asn	Thr	Ile	Trp	Val	Val	Ser	Ala	Ala	His	Cys	Phe	Asp
									35		40			45
Lys	Ile	Lys	Asn	Trp	Arg	Asn	Leu	Ile	Ala	Val	Leu	Gly	Glu	His
									50		55			60
Asp	Leu	Ser	Glu	His	Asp	Gly	Asp	Glu	Gln	Ser	Arg	Arg	Val	Ala
									65		70			75
Gln	Val	Ile	Ile	Pro	Ser	Thr	Tyr	Val	Pro	Gly	Thr	Thr	Asn	His
									80		85			90
Asp	Ile	Ala	Leu	Leu	Arg	Leu	His	Gln	Pro	Val	Val	Leu	Thr	Asp
									95		100			105
His	Val	Val	Pro	Leu	Cys	Leu	Pro	Glu	Arg	Thr	Phe	Ser	Glu	Arg
									110		115			120
Thr	Leu	Ala	Phe	Val	Arg	Phe	Ser	Leu	Val	Ser	Gly	Trp	Gly	Gln
									125		130			135
Leu	Leu	Asp	Arg	Gly	Ala	Thr	Ala	Leu	Glu	Leu	Met	Val	Leu	Asn
									140		145			150
Val	Pro	Arg	Leu	Met	Thr	Gln	Asp	Cys	Leu	Gln	Gln	Ser	Arg	Lys
									155		160			165

Val	Gly	Asp	Ser	Pro	Asn	Ile	Thr	Glu	Tyr	Met	Phe	Cys	Ala	Gly
				170					175					180
Tyr	Ser	Asp	Gly	Ser	Lys	Asp	Ser	Cys	Lys	Gly	Asp	Ser	Gly	Gly
				185					190					195
Pro	His	Ala	Thr	His	Tyr	Arg	Gly	Thr	Trp	Tyr	Leu	Thr	Gly	Ile
				200					205					210
Val	Ser	Trp	Gly	Gln	Gly	Cys	Ala	Thr	Val	Gly	His	Phe	Gly	Val
				215					220					225
Tyr	Thr	Arg	Val	Ser	Gln	Tyr	Ile	Glu	Trp	Leu	Gln	Lys	Leu	Met
				230					235					240
Arg	Ser	Glu	Pro	Arg	Pro	Gly	Val	Leu	Leu	Arg	Ala	Pro	Phe	Pro
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<210> 8

<211> 253

<212> PRT

<213> *Homo sapiens*

<220>

<223> Tissue plasminogen activator

<400> 8

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Gln	Ala	Ala	Ile	Phe	Ala	Lys	His	Arg	Arg	Ser	Pro	Gly	Glu	Arg
				20					25					30
Phe	Leu	Cys	Gly	Gly	Ile	Leu	Ile	Ser	Ser	Cys	Trp	Ile	Leu	Ser
				35					40					45
Ala	Ala	His	Cys	Phe	Gln	Glu	Arg	Phe	Pro	Pro	His	His	Leu	Thr
				50					55					60
Val	Ile	Leu	Gly	Arg	Thr	Tyr	Arg	Val	Val	Pro	Gly	Glu	Glu	
				65					70					75
Gln	Lys	Phe	Glu	Val	Glu	Lys	Tyr	Ile	Val	His	Lys	Glu	Phe	Asp
				80					85					90
Asp	Asp	Thr	Tyr	Asp	Asn	Asp	Ile	Ala	Leu	Leu	Gln	Leu	Lys	Ser
				95					100					105
Asp	Ser	Ser	Arg	Cys	Ala	Gln	Glu	Ser	Ser	Val	Val	Arg	Thr	Val
				110					115					120
Cys	Leu	Pro	Pro	Ala	Asp	Leu	Gln	Leu	Pro	Asp	Trp	Thr	Glu	Cys
				125					130					135
Glu	Leu	Ser	Gly	Tyr	Gly	Lys	His	Glu	Ala	Leu	Ser	Pro	Phe	Tyr
				140					145					150
Ser	Glu	Arg	Leu	Lys	Glu	Ala	His	Val	Arg	Leu	Tyr	Pro	Ser	Ser
				155					160					165
Arg	Cys	Thr	Ser	Gln	His	Leu	Leu	Asn	Arg	Thr	Val	Thr	Asp	Asn
				170					175					180
Met	Leu	Cys	Ala	Gly	Asp	Thr	Arg	Ser	Gly	Gly	Pro	Gln	Ala	Asn
				185					190					195
Leu	His	Asp	Ala	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys
				200					205					210

Leu Asn Asp Gly Arg Met Thr Leu Val Gly Ile Ile Ser Trp Gly
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 Leu Gly Cys Gly Gln Lys Asp Val Pro Gly Val Tyr Thr Lys Val
 230 235 240
 Thr Asn Tyr Leu Asp Trp Ile Arg Asp Asn Met Arg Pro
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<210> 9
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 <212> DNA
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 <223> SNC-19; GeneBank Accession No. #U20428
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B1
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Lys	Val	Glu	Lys	Arg	Gly	Pro	Arg	Arg	Trp	Val	Val	Leu	Val	Ala
									50	55				60
Val	Leu	Phe	Ser	Phe	Leu	Leu	Leu	Ser	Leu	Met	Ala	Gly	Leu	Leu
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Val	Trp	His	Phe	His	Tyr	Arg	Asn	Val	Arg	Val	Gln	Lys	Val	Phe
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Glu	Asn	Ser	Thr	Ser	Thr	Glu	Phe	Ile	Ser	Leu	Ala	Ser	Gln	Val
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Pro	Tyr	His	Lys	Lys	Ser	Ala	Val	Thr	Ala	Phe	Ser	Glu	Gly	Ser
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Thr Arg Phe Thr Thr Pro Gly Phe Pro Asn Ser Pro Tyr Pro Ala
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His Ala Arg Cys Gln Trp Val Leu Arg Gly Asp Ala Asp Ser Val
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260 265 270
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275 280 285
Glu Pro His Ala Val Val Arg Leu Cys Gly Thr Phe Ser Pro Ser
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Tyr Asn Leu Thr Phe Leu Ser Ser Gln Asn Val Phe Leu Val Thr
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320 325 330
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335 340 345
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Pro Pro Asn Ile Asn Cys Thr Trp Asn Ile Lys Val Pro Asn Asn
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Thr Asp Thr Gly Phe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Asn
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455 460 465
Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp Cys Pro Asp Tyr
470 475 480
Ser Asp Glu Arg Tyr Cys Arg Cys Asn Ala Thr His Gln Phe Thr
485 490 495
Cys Lys Asn Gln Phe Cys Lys Pro Leu Phe Trp Val Cys Asp Ser
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Pro Ala Gly Ser Phe Lys Cys Ser Asn Gly Lys Cys Leu Pro Gln
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Thr Tyr Arg Cys Gln Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro
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23

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B1
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10

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SEQ 14

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<210> 15

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gaaggtgaag tcattgaaga

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<210> 16

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<223> β -tubulin forward oligonucleotide primer

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B1
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<211> 20

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<223> β -tubulin reverse oligonucleotide primer

<400> 17

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B1
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<212> PRT

<213> *Homo sapiens*

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<223> Residues 68-76 of the TADG-15 protein

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<212> PRT

<213> *Homo sapiens*

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Leu Leu Tyr Ser Gly Val Pro Phe Leu

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<212> PRT

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<223> Residues 644-652 of the TADG-15 protein

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<212> PRT

<213> *Homo sapiens*

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<212> PRT

<213> *Homo sapiens*

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<210> 24

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<212> PRT

<213> *Homo sapiens*

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B1
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<213> *Homo sapiens*
<220>
<223> Residues 64-72 of the TADG-15 protein
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<210> 28
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<213> *Homo sapiens*
<220>
<223> Residues 57-65 of the TADG-15 protein

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Val Leu Ala Ala Val Leu Ile Gly Leu

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<210> 29

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 67-75 of the TADG-15 protein

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<210> 30

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<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 379-387 of the TADG-15 protein

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b1
b2
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<211> 9

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<213> *Homo sapiens*

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<223> Residues 126-134 of the TADG-15 protein

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<210> 32

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51
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Ala Val Leu Ile Gly Leu Leu Leu Val

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<210> 36

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<212> PRT

<213> *Homo sapiens*

<220>

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<213> *Homo sapiens*

<220>

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Val Leu Ala Ala Val Leu Ile Gly Leu

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B
wf
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<210> 39

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Tyr Ile Asp Asp Arg Gly Phe Arg Tyr

5

B
Y
n
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<210> 42
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<210> 43

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<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 387-395 of the TADG-15 protein

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Leu Leu Glu Pro Gly Val Pro Ala Gly

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<210> 44

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 553-561 of the TADG-15 protein

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B1
Nt
<210> 45

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 97-105 of the TADG-15 protein

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<210> 46

<211> 9

<212> PRT
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<210> 47
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B
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Gly Leu His Ala Arg Gly Val Glu Leu

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Tyr Cys Gly Glu Arg Ser Gln Phe Val

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Thr Cys Lys Asn Lys Phe Cys Lys Pro

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Val Arg Phe His Ser Asp Gln Ser Tyr

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His Gln Phe Thr Cys Lys Asn Lys Phe

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Gly Arg Trp Val Val Leu Ala Ala Val

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<223> Residues 572-580 of the TADG-15 protein

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Thr Asp Thr Gly Phe Leu Ala Glu Tyr

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Gly Glu Ile Arg Val Ile Asn Gln Thr

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Val Glu Ile Asn Gly Glu Lys Tyr Cys

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Arg Asp Val Arg Val Gln Lys Val Phe

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SEQ 40